



## Water-Data Report 2008

**01482520 SALEM RIVER AT SHARPTOWN, NJ**

DELAWARE RIVER BASIN

LOCATION.--Lat 39°39'09", long 75°22'04" referenced to North American Datum of 1983, Salem County, NJ, Hydrologic Unit 02040206, at Kings Highway, 0.2 mi southwest from Church Street, 0.2 mi southwest of Sharptown, 0.2 mi west from County Home Road, and 0.4 mi downstream from confluence with Nichomus Run.

DRAINAGE AREA.--27.3 mi<sup>2</sup>.

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1968, 2007-08.

REMARKS.--Cooperative Network Site Descriptor: Statewide Status, NJ Department of Environmental Protection Watershed Management Area 17.

COOPERATION.--Physical measurements and samples for laboratory analyses were provided by personnel of the NJ Department of Environmental Protection. Determinations of dissolved ammonia, dissolved orthophosphate, suspended residue, ammonia-plus-organic nitrogen in bed sediment, and phosphorus in bed sediment were performed by the NJ Department of Health and Senior Services, Environmental and Chemical Laboratory.

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
Part 1 of 5  
[Remark codes: <, less than; E, estimated.]

Date	Time	Turbidity white light, det ang 90+/-30 corrctd	UV absorb- ance, 254 nm, wat flt	UV absorb- ance, 280 nm, wat flt	Baro- metric pressure, mm Hg	Dis- solved oxygen, mg/L (00025)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif- ic conduc- tance, wat unf μS/cm (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Hard- ness, water, mg/L as CaCO <sub>3</sub> (00900)	Calcium water, fltrd, mg/L (00915)
Nov 27...	1000	5.3	.171	.137	762	7.6	68	7.3	339	11.5	10.0	110	32.2
Feb 19...	0930	10	.155	.119	760	11.5	93	7.3	280	6.0	6.4	90	23.9
May 22...	0930	17	.241	.185	752	8.6	84	7.2	248	14.5	14.2	82	21.9
Aug 05...	1000	6.3	.182	.141	760	5.4	61	7.4	393	25.5	21.5	110	32.8

## Water-Data Report 2008

01482520 SALEM RIVER AT SHARPTOWN, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	ANC, wat unf						Residue water, filtrd,			Residue on evap.		Residue +	
	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	fixed end pt, lab, mg/L as CaCO <sub>3</sub> (90410)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO <sub>2</sub> (00955)	Sulfate, water, fltrd, mg/L (00945)	constituents, water, fltrd, mg/L (70301)	180degC wat flt, mg/L (70300)	total non-filterable, mg/L (00530)	org-N water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)
Nov 27...	8.21	6.74	18.8	58	32.1	.20	12.1	41.7	199	213	2	.47	.037
Feb 19...	7.26	4.79	13.7	36	26.3	.16	10.4	36.6	159	167	9	.64	.135
May 22...	6.75	5.37	10.7	42	20.9	.16	10.5	29.4	140	191	20	1.7	.130
Aug 05...	6.67	7.18	30.0	78	35.5	.32	13.7	40.8	225	239	2	.70	.049

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	Nitrate + nitrite water fltrd, mg/L as N (00631)	Partic-ulate nitro- gen, water, fltrd, mg/L (49570)	Total nitro- gen, water, unfltrd mg/L (00602)	Total nitro- gen, water, unfltrd mg/L (00600)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L as P (00666)	Phos-phorus, water, unfltrd, mg/L as P (00665)	Total carbon, suspnd sedimnt total, mg/L (00694)	Inor-ganic carbon, suspnd sedimnt total, mg/L (00688)	Organic carbon, suspnd sedimnt total, mg/L (00689)	Organic carbon, water, fltrd, mg/L (00681)	Arsenic water, fltrd, µg/L (01000)	Arsenic water, unfltrd µg/L (01002)
Nov 27...	2.81	.09	3.3	3.4	.016	.036	.093	.8	<.04	.8	4.8	--	--
Feb 19...	3.14	.17	3.8	3.9	.022	.042	.115	1.0	<.04	1.0	5.2	.40	.73
May 22...	1.96	.09	3.6	3.7	.039	.090	.220	.6	<.04	.6	7.1	--	--
Aug 05...	2.56	.06	3.3	3.3	.048	.105	.161	.4	<.04	.4	5.3	1.1	1.4

## 01482520 SALEM RIVER AT SHARPTOWN, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 5

[Remark codes: &lt;, less than; E, estimated.]

Date	Barium, water, unfltrd recover -able, μg/L (01007)	Beryll- ium, water, unfltrd recover -able, μg/L (01012)	Boron, water, unfltrd recover -able, μg/L (01020)	Boron, water, unfltrd recover -able, μg/L (01022)	Cadmium water, unfltrd recover -able, μg/L (01027)	Chrom- ium, water, unfltrd recover -able, μg/L (01034)	Copper, water, unfltrd recover -able, μg/L (01042)	Iron, water, unfltrd recover -able, μg/L (01045)	Lead, water, unfltrd recover -able, μg/L (01051)	Mangan- ese, water, unfltrd recover -able, μg/L (01055)	Mercury water, unfltrd recover -able, μg/L (71900)	Nickel, water, unfltrd recover -able, μg/L (01067)	Selen- ium, water, unfltrd recover -able, μg/L (01147)
Nov 27...	--	--	68	--	--	--	--	--	--	--	--	--	--
Feb 19...	43.3	.05	38	34	.05	.47	1.2	913	.57	67.5	<.010	2.7	.26
May 22...	--	--	30	--	--	--	--	--	--	--	--	--	--
Aug 05...	40.5	<.04	119	132	.07	E.30	1.4	1,040	.40	63.3	<.010	3.1	.31

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007**  
**TO SEPTEMBER 2008**

Part 5 of 5

[Remark codes: <, less than;  
E, estimated.]

Date	Silver, water, unfltrd recover -able, μg/L (01077)	Zinc, water, unfltrd recover -able, μg/L (01092)
Nov 27...	--	--
Feb 19...	<.02	7.2
May 22...	--	--
Aug 05...	<.02	7.0

## 01482520 SALEM RIVER AT SHARPTOWN, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 7

[Remark codes: &lt;, less than; E, estimated.]

Date	1-Naph-thol, water, 0.7u GF	2,6-Di-ethyl-aniline, water, 0.7u GF	2Chloro- -2',6'-diethyl acetanilide CIAT, wat flt	2-Ethyl- -6-methyl-chloro-aniline water, fltrd,	3,4-Di-chloro-aniline water, fltrd,	3,5-Di-chloro-aniline water, fltrd,	4-Chloro-2methyl-phenol, water, fltrd,	Aceto-chlor, water, fltrd,	Ala-chlor, water, fltrd,	alpha-sulfan, water, fltrd,	Endo-sulfan, water, fltrd,	Atra-zine, water, fltrd,	Azin-phos-methyl oxon, water, fltrd,
	μg/L (49295)	μg/L (82660)	μg/L (61618)	μg/L (04040)	μg/L (61620)	μg/L (61625)	μg/L (61627)	μg/L (61633)	μg/L (49260)	μg/L (46342)	μg/L (34362)	μg/L (39632)	μg/L (61635)
May 22...	<.04	<.006	<.010	E.170	<.010	<.006	<.008	<.005	<.006	E.006	<.006	1.52	<.04

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 7

[Remark codes: &lt;, less than; E, estimated.]

Date	Azin-phos-methyl, water, 0.7u GF	Ben-flur-alin, water, 0.7u GF	Car-baryl, water, 0.7u GF	Carbo-furan, water, 0.7u GF	Chlor-pyrifos oxon, water, 0.7u GF	Chlor-pyrifos water, fltrd,	cis-Per-methrin water, fltrd,	cis-Propi-conazole, water, 0.7u GF	Cyana-zine, water, fltrd,	Cyflu-thrin, water, fltrd,	lambda-Cyhalothrin, water, fltrd,	Cyper-methrin, water, fltrd,	DCPA, water, 0.7u GF
	μg/L (82686)	μg/L (82673)	μg/L (82680)	μg/L (82674)	μg/L (61636)	μg/L (38933)	μg/L (82687)	μg/L (79846)	μg/L (04041)	μg/L (61585)	μg/L (61595)	μg/L (61586)	μg/L (82682)
May 22...	<.120	<.010	E.007	<.020	E.01	<.005	<.010	<.006	<.020	<.016	<.004	<.014	<.003

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 7

[Remark codes: &lt;, less than; E, estimated.]

Date	Desulf- inyl- fipro- nil, water, fltrd,	Diazi- non, water, fltrd,	Dicro- tophos, water, fltrd,	Diel- drin, water, fltrd,	Dimeth- oate, water, 0.7u GF	Disulf- oton, sulfone water, fltrd,	Disul- foton, water, 0.7u GF	Endo- sulfan sulfate water, fltrd,	EPTC, water, 0.7u GF	Ethion monoxon water, fltrd,	Ethion, water, fltrd,	Etho- prop, water, 0.7u GF	Fenami- phos sulfone water, fltrd,
	μg/L (62170)	μg/L (39572)	μg/L (38454)	μg/L (39381)	μg/L (82662)	μg/L (61640)	μg/L (82677)	μg/L (61590)	μg/L (82668)	μg/L (61644)	μg/L (82346)	μg/L (82672)	μg/L (61645)
May 22...	<.012	E.005	<.08	E.003	<.006	<.01	<.04	<.022	<.002	<.02	<.006	<.012	<.053

## 01482520 SALEM RIVER AT SHARPTOWN, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 7

[Remark codes: &lt;, less than; E, estimated.]

Date	Fenami-phos sulf- oxide, water, fltrd, μg/L (61646)	Fenami-phos, water, fltrd, μg/L (61591)	Desulf-inyl- fipro- nil sulfide water, amide, wat flt μg/L (62169)	Fipro-nil sulfide water, water, fltrd, μg/L (62167)	Fipro-nil sulfone water, water, fltrd, μg/L (62168)	Fipro-nil sulfone water, water, fltrd, μg/L (62166)	Fonofos water, water, fltrd, μg/L (04095)	Hexa-zinone, water, water, fltrd, μg/L (04025)	Ipro-dione, water, water, fltrd, μg/L (61593)	Isofen-phos, water, water, fltrd, μg/L (61594)	Mala-oxon, water, water, fltrd, μg/L (61652)	Mala-thion, water, water, fltrd, μg/L (39532)	Meta-laxyl, water, water, fltrd, μg/L (61596)
May 22...	<.20	<.03	<.029	<.013	<.024	<.020	<.010	<.008	<.01	<.006	<.020	<.016	<.007

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 5 of 7

[Remark codes: &lt;, less than; E, estimated.]

Date	Methid-athon, water, fltrd, μg/L (61598)	Methyl para-thion, water, fltrd, μg/L (61664)	Methyl para-thion, water, 0.7u GF (82667)	Metola-chlor, water, fltrd, μg/L (39415)	Metribuzin, water, fltrd, μg/L (82630)	Moli-nate, water, fltrd, 0.7u GF (82671)	Myclo-butanol water, fltrd, μg/L (61599)	Oxy-fluor-fen, water, fltrd, μg/L (61600)	Pendi-methalin, water, fltrd, 0.7u GF (82683)	Phorate oxon, water, fltrd, μg/L (61666)	Phorate water, fltrd, 0.7u GF (82664)	Phosmet oxon, water, fltrd, μg/L (61668)	Phosmet water, fltrd, μg/L (61601)
May 22...	<.004	<.01	<.008	.919	<.012	<.003	<.010	<.006	<.012	<.03	<.040	<.05	<.008

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 6 of 7

[Remark codes: &lt;, less than; E, estimated.]

Date	Promo-ton, water, fltrd, μg/L (04037)	Promo-tryn, water, fltrd, μg/L (04036)	Propy-zamide, water, 0.7u GF (82676)	Propy-zamide, water, 0.7u GF (82679)	Propanil, water, fltrd μg/L (82685)	Propar-gite, water, fltrd μg/L (82685)	Simazine, water, fltrd μg/L (04035)	Tebu-thiuron water, fltrd μg/L (82670)	Teflu-thrin, water, fltrd μg/L (61606)	Terbufos water, fltrd, 0.7u GF (61674)	Terbu-fos, water, fltrd, μg/L (82675)	Terbutyl-azine, water, fltrd, μg/L (04022)	Thio-bencarb, water, fltrd, 0.7u GF (82681)	trans-Propi-conazole, water, fltrd, μg/L (79847)
May 22...	E.01	<.006	<.004	<.006	<.04	.086	<.02	<.003	<.04	<.02	<.01	<.010	<.02	

## 01482520 SALEM RIVER AT SHARPTOWN, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO**  
**SEPTEMBER 2008**

Part 7 of 7

[Remark codes: &lt;, less than; E, estimated.]

Date	Tri-	flu-	Di-
	tribu-	alin,	chlor-
	phos,	water,	vos,
	water,	filtrd	water,
	filtrd,	0.7u GF	filtrd,
	µg/L	µg/L	µg/L
	(61610)	(82661)	(38775)

  

May			
22...	<.035	<.009	<.01

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 1 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Time	Ammonia		Phos-		Inor-		Chrom-		Lead,			
		pH	org-N, bed sedimnt std units	+ bed bed sed total, mg/kg	phorus, bed sedimnt total, mg/kg	Total carbon, bed sedimnt total, mg/kg	Inorganic carbon, bed sedimnt total, g/kg	Arsenic bed recover -able, ug/g	Cadmium bed recover -able, ug/g	ium, bed sedimnt recover -able, ug/g	Cobalt bed recover -able, ug/g	Copper, bed recover -able, ug/g	Iron, bed sedimnt total digest, ug/g
Aug 05...	1000	6.62	130	8,100	1.4	<.2	9.0	.260	250	4.4	4	190,000	5.6

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 2 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Mangan-		Sele-		1,2-Di-		1,6-Di-		1Methyl		1-		236Tri-		2,6-Di-		2-Ethy	
	ese,	Mercury	Nickel,	rium,	Zinc,	methyl-	methyl-	-9H-	naphth-	phenan-	1-Methyl-	1-	Methyl-	naphth-	methyl-	naphth-	alene,	alene,
	bed	bed	bed	bed	bed	naphth-	naphth-		alene,	ene,	pyrene,	1-	Methyl-	naphth-	methyl-	naphth-	alene,	
	sedimnt	sedimnt	sedimnt	sedimnt	sedimnt	alene,	alene,		alene,	ene,	bed sed	Methyl-	pyrene,	bed sed	alene,	alene,	bed sed	
	recover	recover	recover	recover	recover	bed sed	bed sed		bed sed	bed sed	<2 mm,	1-	phenan-	bed sed	alene,	alene,	bed sed	
	-able,	-able,	-able,	-able,	-able,	<2 mm,	<2 mm,		<2 mm,	<2 mm,	<2 mm,	Methyl-	pyrene,	bed sed	alene,	alene,	bed sed	
	ug/g	ug/g	ug/g	ug/g	ug/g	ug/kg	ug/kg		ug/kg	ug/kg	wsv nat	1-	phenan-	bed sed	alene,	alene,	bed sed	
	(01053)	(71921)	(01068)	(64848)	(01093)	(49403)	(49404)		(49398)	(49398)	(49410)	236Tri-	2,6-Di-	2-Ethy	236Tri-	2,6-Di-	2-Ethy	
Aug 05...	880	<.007	6.1	.2	380	<50	<50		<50	<50	E2	E2	<50	<50	<50	<50	<50	

## 01482520 SALEM RIVER AT SHARPTOWN, NJ—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 3 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	2-Methyl-anthra-cene, bed sed <2 mm, bs ug/kg (49435)	4H-Cyclo-penta-fluor-ene, phenan-threne, <2 mm, bed sed ug/kg (49411)	9H-Fluor-naphth-ene, bed sed ug/kg (49399)	Ace-naphth-ylene, bed sed ug/kg (49429)	Ace-naphth-ylene, bed sed ug/kg (49428)	Anthra-cene, <2 mm, wsv nat field, <2 mm ug/kg (49434)	Benzene, [a]-anthra-cene, bed sed ug/kg (49436)	Benzene, [a]-anthra-cene, bed sed ug/kg (49389)	Benzene, [b]-pyrene, bed sed ug/kg (49458)	Benzene, [b]-anthene, bed sed ug/kg (49408)	Benzene, [b]-peryl-ene, bed sed ug/kg (49397)	Benzene, [k]-fluor-anthene, bed sed ug/kg (49450)	Chrysene, bed sed wsv nat ug/kg (49461)	Dibenzo-[a,h]-anthra-cene, bed sed ug/kg (49461)
Aug 05...	<50	<50	<50	<50	E3	E2	E5	E6	E9	<50	E4	E5	<50	

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Part 4 of 4

[Remark codes: &lt;, less than; E, estimated.]

Date	Fluor-anthene, bed sed <2 mm, wsv nat ug/kg (49466)	Indeno[1,2,3-cd]pyrene, bed sed ug/kg (49390)	Iso-phorone, bed sed ug/kg (49400)	Naphth-alene, bed sed ug/kg (49402)	p-PCBs, bed sed ug/kg (39519)	Phenol, Cresol, bed sed ug/kg (49451)	Phenanthrene, bed sed ug/kg (49409)	Phenanthrene, bed sed ug/kg (49393)	Pyrene, bed sed ug/kg (49387)	Bed sediment, dry svd wsv nat ug/kg (80164)
Aug 05...	E9	E4	<50	<50	<5.00	<50	E3	<50	E9	.1